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Resourcing Innovation
Assessment Learning Model – Business Acumen

Dr. Bruce Rideout—is currently the Senior Advisor for the Program Management and Acquisition Group (APMG). In his former role as the Director of Continuous Process Improvement (CPI) supporting NAVAIR's Program Executive Office (PEO) for Common Systems (CS), he supported the Organizational Development and Strategic Initiatives for the executive and five program offices. He recently developed the business acumen assessment model to baseline 32 programs across the NAVAIR Command. In addition, he designed and executed the Fleet Readiness Centers (FRC) procurement transformation for the Command, developing and implementing standardized acquisition processes and establishing a common organizational structure at the FRCs. He received the Navy's Meritorious Civilian Service Award for this effort. Other strategic initiatives he assisted: Mission Aligned Organization (MAO) Transformation Core Team, NAVAIR's Knowledge Management System, and NAVAIR University's concept of operations.

Before his current government service, Rideout was a Vice President of Supply Chain Optimization for a private equity firm driving large-scale supply chain transformation and lean operations. He also supported the Federal Aviation Administration's (FAA) strategic programs as the Managing Director of a consulting firm. Rideout has worked in the energy business as a Corporate Vice President leading their business process improvement program and Program Leader for their generation fleet business transformation and infrastructure program leading process improvement in work management, equipment reliability, and enterprise asset management (EAM) systems. When he was at General Electric (GE), he served as a General Manager and chemical operations leader for its plastics business as well as a Six Sigma Master Black Belt driving business-wide improvements.

Rideout is a certified Lean Six Sigma Master Black Belt (MBB), Project Management Professional (PMP) as well as Defense Acquisition University (DAU) certification in Program Management, Science & Technology, and Engineering. He earned his bachelor's degree in mechanical engineering, cum laude, from the University of Florida, a master's degree in public administration from Valdosta State University, and a doctorate from Florida Institute of Technology in business administration. He was named the Graduate Student of the Year in 2021/22. Rideout served in the U. S. Marine Corps as an officer in the Artillery, Air and Naval Gunfire Company (ANGLICO) and commanded a Marine detachment on sea duty. He has completed executive programs at the Office of Personnel Management's (OPM) Federal Executive Institute and GE's Managerial Development Course. His community service roles include the Board of Directors, Chamber of Commerce (Hancock County), Credit Committee (Wyochem Credit Union), and City Commissioner for Planning and Zoning (Green River, WY).

Jennifer Chermansky—Ms. Chermansky's federal career spans over 26 years, which has shaped broad Department of Navy acquisition financial management knowledge. As the Director of the NAVAIR Program & Business Analysis Department (PBAD) since 2020, she leads all the manpower, processes, and tools associated with the Business Financial Managers (BFMs) of NAVAIR headquarters. Her responsibilities include the professional development of BFMs, establishment, sustainment, and improvement of financial management processes within the Planning Programming Budgeting and Execution (PPBE) construct, and refinement of business and financial tools utilized by the NAVAIR enterprise financial management community. She is an enabling leader of 900+ BFM professionals, assigned to programmatically and functionally diverse business units and NAVAIR commands, including headquarters and a nationwide network of field activities.

Before the PBAD Department position, Chermansky served for two years as a Division Head for the Naval Air Warfare Center Aircraft Division (NAWCAD) - Program and Business Analysis Department (PBAD) and lead BFMs who supported major Naval Air Systems Command (NAVAIR) programs across PEO AIR Anti-Submarine Warfare (ASW) (PEO (A)) and PEO Joint Strike Fighter (PEO JSF) Joint Program Office acquisition programs. Chermansky served as a

NAVAIR Comptroller Budget Division Director for nine years within two separate divisions: the Program Executive Office for Unmanned Aircraft & Weapons (PEO U&W) and Program Executive Office for Common Systems (PEO CS) division and the PEO AIR Anti-Submarine Warfare (ASW) (PEO (A)) division. She fiscally managed all investment appropriations across numerous Major Defense Acquisition Programs (MDAP) within those divisions. She was instrumental in the creation of financial management tools, budget documentation, policies, processes, and procedures spanning the entire NAVAIR Enterprise. Over 12 years, Chermansky served as a BFM for several MDAP program offices, including several joint, such as PMA257 – Harrier (AV-8B; lead BFM), PMA265-F/A-18, PMA275 V-22 Osprey (lead BFM), as well as PMA281 (Naval Aviation Mission Planning) and PMA299 (MH-60R).

Chermansky earned a Bachelor of Arts degree in economics from St. Mary's College of Maryland in St. Mary's City, MD, and a Master of Science degree in business management from the Florida Institute of Technology in Melbourne, FL. She is Level III in the DoD Financial Management Certification Program and Advanced Level certified for the Defense Acquisition Workforce Improvement Act in Business-Financial Management. She has been recognized with a DoN Meritorious Civilian Service Award.

Abstract

The Navy's strategy continues to highlight the need for new thinking and innovative acquisition approaches to meet the demands of the Fleet. As stated in Rand's DoD FY2018 National Defense Authorization Act report (Werber et al., 2019), there are gaps in the acquisition workforce's business acumen knowledge that current training approaches have not been able to resolve. The NAVAIR enterprise sought to baseline the current levels of understanding in a program office's business acumen skills while engaging the workforce in an organic learning environment.

This research uses the Capability Maturity Model (CMM) maturity levels overlaid across the Planning, Programming, Budgeting, and Execution (PPBE) system to offer an innocuous way to ascertain a program office's capability in the business acumen domain. The model applies maturity levels as the backdrop across PPBE processes and subprocesses and uses questions to assess how well a program office executes its work practices. Improving maturity levels for work practices has been demonstrated to improve performance (Information Systems Audit and Control Association [ISACA], 2023). This research is grounded in Experiential Learning Theory (Kolb & Kolb, 2008) and uses facilitated sessions to examine leading practices that can be instrumental in fostering a learning culture within an organization. Follow-up surveys and analysis will answer the research question: What is the efficacy of the assessment learning model in improving business acumen/PPBE processes?

The Assessment Learning Model (ALM) provides a common approach for baselining a Defense Acquisition program office's proficiency in a specified domain while deploying a learning element to utilize in perpetuity. The ALM provides a foundation of how well processes and procedures are used to increase performance and improve decision-making across the enterprise. The ALM provides an authoritative learning assessment model that can be tailored to different domains.

Keywords: Acquisition innovation, capability maturity model, PPBE system, experiential learning, enabling leadership, assessments, audits, business acumen.

Assessment Learning Model

Statement of Research Issue

The Navy's strategy continues to highlight the need for new thinking and innovative approaches to meet the demands of the Fleet (Department of the Navy Research Development Test & Evaluation, 2017; Department of the Navy, 2016). The realities of funding shortfalls and leaner workforces combined with increased global

threats require more advanced business processes and management cultures to meet the dynamic needs of the fleet (Boyatzis, 2011). The nation's adversaries have increased their capability to acquire and deploy military assets faster. The near-peer adversaries challenge the core of NAVIAR's value proposition to acquire, deliver, and sustain aviation and weapon systems for the Fleet.

To address these challenges, the Assessment Learning Model (ALM) proposes a common approach for baselining a Defense Acquisition program's proficiency in a specified domain. Furthermore, the model can deploy an organizational learning element to be utilized in perpetuity. The ALM offers a path to reach deeper into a program's structure and engage the agency of mid-tier employees. The ALM provides an authoritative learning model that can be tailored to different domains. The model leverages existing leading (work) practices and can effectively foster a learning culture within an organization. This proposed study will launch an assessment learning model and validate the efficacy of this approach to improve business acumen.

Background

The U. S. Navy has launched the *Get Real, Get Better* effort, described as a new way of thinking and problem-solving. It is designed to improve outcomes in capability, affordability, and availability. The Acquisition Learning Model is an effort to build learning teams and expand critical thinking to deliver warfighting capability to the Fleet at an affordable cost. According to the Virtual Acquisition Office (VAO) Research Institute (2022), business acumen is a skill that needs further development in the acquisition workforce and can save considerable funds when it is further developed. Possible explanations for limited expertise in business acumen include the pressures and tensions that program teams experience in executing their singular duties, which inhibits collective thought or establishment of holistic, adaptive business approaches.

The assessments are not *graded* intrinsically but highlight less mature processes or areas that should be addressed. During the assessment process, team interaction is crucial in establishing an organic learning environment and emphasizing that the output depends on the quality of the input. Although improving working practices is essential, establishing and then applying the learning organization elements is the goal. Experiential learning and enabling leadership play a key role. The effort should yield increased organizational know-how through cognitive work efforts (Rideout, 2023). The assessment is not for comparison with other entities but rather to identify through a collaborative effort the maturity levels of targeted business processes and the management culture while promoting dialogue between organizational boundaries.

Research Objective

The ALM is designed to provide a foundational view or baseline of how well processes and procedures are used to increase performance and improve decision-making across the enterprise. This concept paper examines the Business Acumen use of the Assessment Learning Model across 32 NAVAIR program offices. This research is grounded in Experiential Learning Theory (Kolb & Kolb, 2008). Experiential learning is a cyclic learning process that Kolb and Kolb (2005) posit is more than knowledge delivery; it is the creation of knowledge through grasping and transforming experience from cognitive work effort. Nonaka et al. (2006) suggest that organizational knowledge can be created and provide a competitive advantage.

The focus is to evaluate the business acumen proficiency of a program office's financial management by examining its use of the Planning, Programming, Budgeting,

and Execution (PPBE) system. The four sub-processes of the PPBE system examined are the Program Objective Memorandum (POM), Budget Formulation, Spend Plan Management, and Unliquidated Obligation Management (ULO). This ALM also includes key management cultural parameters, such as Decision Rights, Patterns of Interaction, and Distribution of Information.

Technical Concept and Research Design

As stated earlier, the Navy has recognized the need to improve vital operating domains and apply elements of a learning organization to accelerate learning. For NAVAIR, the business acumen domain was initially identified as an immediate area of focus. The NAVAIR enterprise sought to baseline the current levels of understanding in a Program Office's business acumen skills while engaging the workforce in a learning environment. As described by the Capability Maturity Model (CMM) and modified by the Capability Maturity Model Integration (CMMI) approaches, the maturity levels offer an innocuous way to ascertain a program office's capability in the business acumen domain. Improving maturity levels for work practices has been demonstrated to improve performance (Information Systems Audit and Control Association [ISACA], 2023).

Research Description

This research applies the CMM/CMMI maturity levels as the backdrop across the PPBE system processes to assess how well program offices execute them. The CMMI approach uses an appraisal process (ISACA, 2023) to determine if specific practices are in place, where the ALM examines how well or effectively the team executes a specific process or sub-process. The ALM offers a modular approach that can be used across multiple domains and establishes learning organization elements and infrastructure to increase proficiency across the enterprise.

A process's maturity level does not equate to *good* or *bad*. Instead, it is a compass for navigating an organization's gaps and areas that can be further cultivated. Many variables and factors affect the maturity level that a process may fall into, such as workforce experience and skill level, external factors that are out of the organization's control, and lack of resources within specific areas or as a whole. Figure 1 shows the definition of maturity levels as published in open-source documents.
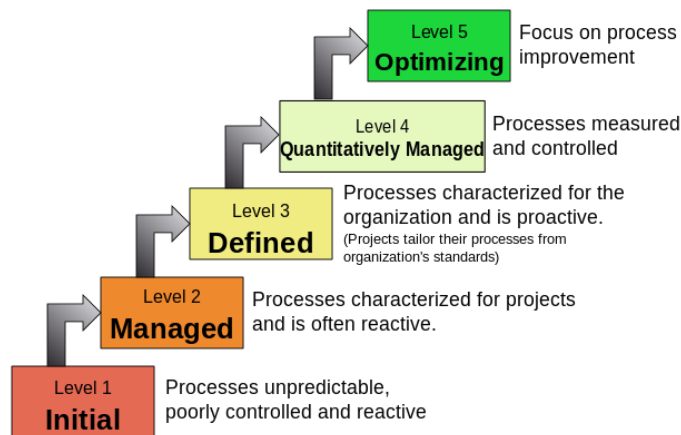
Characteristics of the Maturity levels

Figure 1. CMM Levels of Maturity
(Godfrey, 2004)

Research Questions

This project addresses the following prime research question:

What is the efficacy of the assessment learning model in improving program offices' business acumen/PPBE processes? The following three clarifying questions provide insight into the prime research question:

> 1. Was the facilitative approach effective?
>
> 2. Is the maturity model design an effective approach?
>
> 3. Is the assessment a practical learning approach?

Research Methodology

Domain selection. Selecting the domain requires consideration of the right altitude or level to provide the most effective learning experience. As stated in Rand's Department of Defense (DoD) FY2018 National Defense Authorization Act report (Werber et al., 2019), there are gaps in the acquisition workforce's business acumen knowledge that current training approaches still need to be able to resolve. Although there is no standard definition of business acumen for the acquisition workforce (Werber et al., 2019), the Office of Personnel Management (OPM) defines business acumen as consisting of three main elements: financial management, workforce development, and digital transformation (as shown in Figure 2).
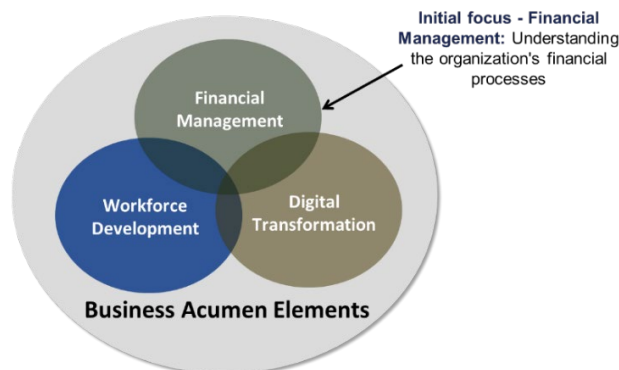

Figure 2. OPM Definition of Business Acumen
(U. S. Office of Personnel Management, 2023)

The financial management element of business acumen for the acquisition workforce is described by the VAO Research Institute (2022) as "Understanding the organization's financial processes. Prepares, justifies, and administers the program budget. Oversees procurement and contracting to achieve desired results. Monitors expenditures and uses cost-benefit thinking to set priorities" (p. 1). The initial focus was on the financial component of business acumen. It further selected the significant financial management processes for programs: Planning, Programming, Budgeting, and Execution, with greater emphasis on the programming, budgeting, and execution phases. During the assessment, the participants also discussed the relationship of financial management to the workforce development and digital transformation sections of the POM's definition of business acumen.

After choosing the process and sub-processes to query, the next step was to develop the key criteria to determine the maturity levels in each sub-process. In the business acumen initiative, the PPBE system served as the framework for assessment

and is used at all DoD levels. The PPBE documents support the Future Years Defense Program (FYDP). The Congressional Research Service (2022) states, "PPBE is one of DOD's three main acquisition-related decision support systems" and, therefore, a critical process. The project investigators, assisted by a selected core team, developed a workbook that developed the detailed criteria to be asked during the assessment.

Assessment deployment. A pre-brief to key program leaders was conducted and helped describe the premise of the assessment and how to use the model for best results. It provided an opportunity to describe which team members should attend for a maximum range of participation across functional areas and various skill levels. The key program office leaders introduced a three-hour working session by providing opening remarks for the assessment to level set their team. The core team presented kick-off slides to the program office team, which assessed the team and explained the importance of the effort and the mechanics during the session to include the minimum assessment criteria. Active facilitation from the core team during the session was necessary.

Survey launch and data collection. The core team developed and launched a survey of participants to determine the efficacy of the effort. The survey addressed the research questions as quantitative and qualitative, with numerical scores and open-ended questions.

Data Analysis

Demographics

There were 163 participant responses. Table 1 describes in detail the demographics solicited in the survey: functional area, job level, acquisition experience, and highest program level experience. The data shows that the functional areas are evenly split between the program and financial domains. The job level data shows that more than one-third of participants were at a senior level in the program, which connotes significant program financial responsibilities. Similarly, more than half of the respondents have more than 15 years of acquisition experience and overwhelmingly have a large program or ACAT I experience. This demographic data shows the survey participants have deep acquisition experience and knowledge, which provides the survey results a measure of validity.

Table 1. Survey Participant Demographics

Functional Area		Job Level		Acquisition Experience		Program Level	
Program Management	51%	PM/PDPM DPM	22%	21+ years	32%	ACAT I	85%
Financial Management	45%	Level I	14%	16-20 years	26%	ACAT II	5%
Other	4%	Level II	7%	11-15 years	25%	ACAT III	3%
		Level III	1%	6-10 years	9%	ACAT IV	5%
		Support	56%	0-5 years	8%	Other	2%

Facilitative Effectiveness

In each of Figures 3 through 5, this study posits that Strongly Agree and Agree can be characterized as having met a positive threshold. Figure 3 shows that 83% of the respondents agree that adequate time was allowed for the assessment. The facilitative approach was 84% effective at creating open dialogue, and 80% felt that their input was considered. Overall, the facilitative approach was considered 81% effective.
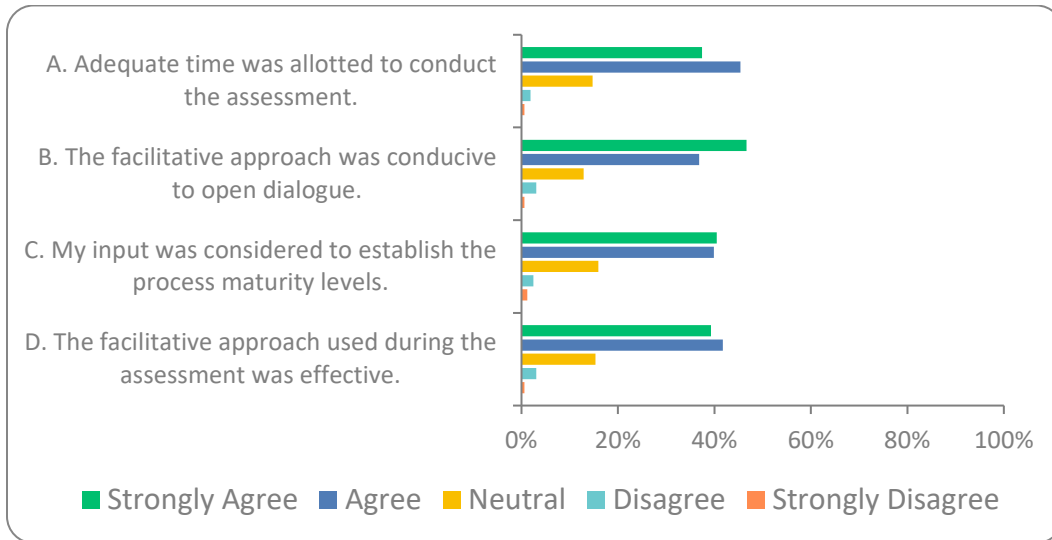

Figure 3. Facilitative Approach Effectiveness

Model Design Effectiveness

Figure 4 provided results on the model's design effectiveness. Seventy-three of the respondents described the tool/learning model as easy to use, while 68% described the maturity levels as clear to use. The survey participants recorded that the assessment tool/learning model was useful and provided a baseline of the program's business process at 69% and 70%, respectively. These numbers display a clear signal that the assessment learning model answers the research questions.
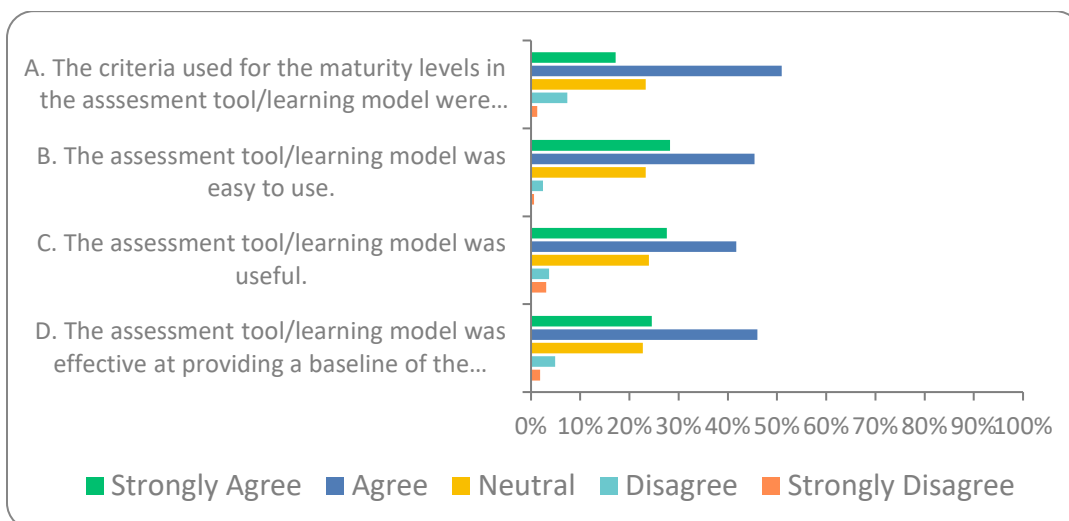

Figure 4. Model Design Effectiveness

Assessment Effectiveness

Figure 5 shows that 74% of the survey respondents believe the assessment approach provided a practical learning environment. Sixty-nine percent thought the assessment helped them understand the internal process differences between the organizational elements in the program office. In addition, 64% thought the assessment provided a potential road map on how to mature existing business and management culture processes. Finally, 69% believe the assessment can be effective in baselining other program office processes and domains.
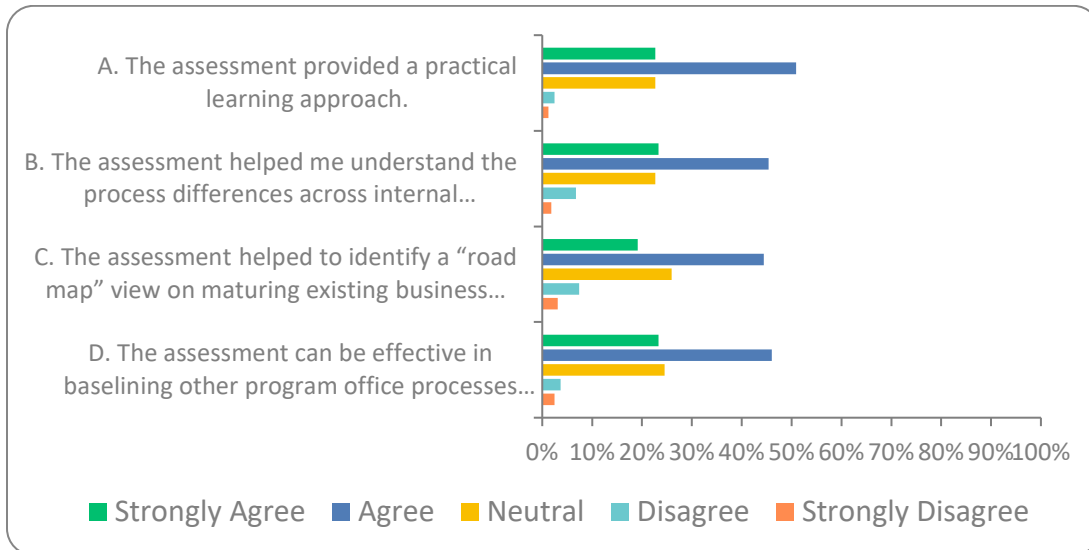

Figure 5. Assessment Effectiveness

Research Relevance and Conclusions

To aid in the continuous development of the acquisition workforce, as noted in the DoD (2015) *Acquisition Workforce Strategic Plan*, this research used qualitative and quantitative methods to explore the efficacy of deploying the assessment learning model for the chosen domain. The overarching concept is to create an interactive and positive learning environment for the program offices that accelerates learning.

The assessment was conducted in a team environment, emphasizing open conversation among the team members to allow for an organic learning environment. As noted earlier, the value of the assessment learning model is in the dialogue and exchange of points of view within the organization. The team environment provides a cross-functional aspect and efficiently reaches multiple team members. For example, in the business acumen domain initiative, 32 program offices were assessed, with an average of approximately 16–18 participants in each assessment for an engagement of 575 people.

As noted in the data analysis section, the quantitative results provide insight into the efficacy of the assessment learning model. The data shows that the three clarifying questions were answered. The facilitative approach is effective, the maturity model is an effective design, and the assessment provides a practical learning approach. These data results provide insight into an accelerated learning tool with the maturity model that provides an innovative approach.

The top qualitative responses were distilled into key themes. The participants described the strengths of the assessment tool/learning model as providing valuable

cross-talk and illuminating or providing insight into process areas that need improvement. Potential areas for improvement were mostly in facilitation improvement to refine the content and improve the pre-assessment communications. The majority of respondents stated in the qualitative section of the survey that *no improvements were needed*.

The net promoter score (NPS) model (scale 1–10) was used to ask if the participants would recommend the assessment tool/learning model to a colleague. The resultant distribution was roughly equally stratified in thirds. Promoters (9–10) accounted for 30%, Passives (7–8) 36%, and detractors (1–6) 34% of the respondents.

In conclusion, the qualitative and quantitative data provide sufficient evidence that the assessment and model approach provide a useful and effective method to baseline and improve processes and performance in a given domain.

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